



ENGINEERING OPERATIONS COMMITTEE  
MEETING MINUTES  
AUGUST 3, 2006 – 9:00 A.M.  
MULTI-MODAL CONFERENCE ROOM

*Present:* L. E. Tibbits J. Friend J. Polasek  
B. O'Brien J. Reincke M. VanPortFleet  
J. D. Culp T. Anderson T. Fudaly  
C. Bleech E. Burns

*Absent:* C. Roberts

*Guests:* M. Bott B. Krom A. Clover (for C. Roberts)

OLD BUSINESS

**1. Approval of the Minutes of the May 4, 2006, Meeting – L. Tibbits**

The May 4, 2006, meeting minutes are approved. Terry Anderson is the new Region Engineer rep on EOC, replacing Mark Chaput.

NEW BUSINESS

**1. Pavement Selections – B. Krom**

**a. I-94 Reconstruction, CS 39024, JN 86055 and 86633**

The reconstruction alternates considered were an HMA pavement (Alternate 1 – equivalent uniform annual cost [EUAC] \$132,659/directional mile) and a jointed plain concrete pavement (Alternate 2 - EUAC \$103,960/directional mile). A life cycle cost analysis was performed and Alternate 2 was approved based on having the lowest EUAC. The pavement design and cost analysis are as follows:

13"..... Jointed Plain Concrete Pavement w/16' joint spacing (mainline & outside shldr)  
9".....Jointed Plain Concrete Pavement w/16' joint spacing (inside shoulder)  
6"..... Aggregate Base, Mod (mainline & outside shoulder)  
10".....Aggregate Base, Mod (inside shoulder)  
Geotextile Separator  
10"..... Sand Subbase  
6" dia.....Open-Graded Underdrain System  
29".....Total Thickness

Present Value Initial Construction Costs ..... \$1,189,082/directional mile  
Present Value Initial User Costs ..... \$556,091/directional mile

Present Value Maintenance Costs.....	\$113,300/directional mile
Equivalent Uniform Annual Cost .....	\$103,960/directional mile

**b. US-131/M-66 Reconstruction: CS 40012 and 05071, JN 60346**

The reconstruction alternates considered were an HMA pavement (Alternate 1 – EUAC \$27,963/directional mile) and a jointed plain concrete pavement (Alternate 2 - EUAC \$52,760/directional mile). A life cycle cost analysis was performed and Alternate 1 was approved based on having the lowest EUAC. The pavement design and cost analysis are as follows:

2” .....	HMA, 4E3, Top Course (mainline & shoulders)
2” .....	HMA, 4E3, Leveling Course (mainline & shoulders)
3” .....	HMA, 3E3, Base Course (mainline)
6” .....	Aggregate Base (mainline)
9” .....	Aggregate Base (shoulders)
	Existing Sand Subbase
13” .....	Total Section Thickness

Present Value Initial Construction Costs .....	\$407,807/mile
Present Value Initial User Costs .....	\$16,478/mile
Present Value MOT Costs .....	\$33,812/mile
Present Value Maintenance Costs.....	\$89,958/mile
Equivalent Uniform Annual Costs.....	\$27,963/mile

**2. Modification of Maintenance Crossover Standard – M. Bott**

The Traffic Recommendation Committee is recommending improvements to the design of maintenance crossovers due to the increased size of maintenance vehicles in recent years. The width of the crossovers and radii has been increased, the alignment has been slightly skewed, and paved deceleration tapers are being added. This will enhance safety for maintenance and emergency vehicles, incident management, and evacuation operations.

**ACTION:** The recommendation is approved; however, the new design standard will be an alternative to the current design standard. The current MDOT policy on crossover locations will be reviewed prior to adopting a new standard.

**3. Revision of Standard Specifications to Allow Dual Wall Corrugated Steel Pipe – Type IIA as an Alternate Pipe for Culverts and Sewers – M. VanPortFleet**

Current specifications allow the use of dual wall corrugated steel pipe – Type IIA as an alternate pipe for culverts and sewers only when authorized by the engineer. This restriction has been in the specifications for many years for no known reason. Investigations by the Pipe Selection Task Group did not find any known concerns with the use of this pipe.

It is recommended that a pilot provision be implemented allowing the use of Type IIA (smooth lined) corrugated steel pipe as an alternate pipe for culverts and sewers without prior authorization by the engineer. This provision will remain in place until at least 5000 Lft have been placed. The performance of the pipe will be monitored.

**ACTION:** The recommendation is approved. The current frequently used special provision for culverts and sewers will be revised to allow the use of dual wall corrugated steel pipe – Type IIA as an alternate pipe for culverts and sewers.

(Signed Copy on File at C&T)

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Brenda J. O'Brien, Secretary  
Engineering Operations Committee

BJO:kar

cc:	K. Steudle	S. Mortel	J. Steele (FHWA)
	J. Shinn	D. Jackson	R. Brenke (ACEC)
	L. Hank	W. Tansil	G. Bukoski (MITA)
	EOC Members	D. Wresinski	D. DeGraaf (MCPA)
	Region Engineers	C. Libiran	D. Hollingsworth (MCA)
	TSC Managers	R. J. Lippert, Jr.	J. Becsey (APAM)
	Assoc. Region Engineers	T. L. Nelson	M. Newman (MAA)
	T. Kratofil	T. Phillips	J. Murner (MRPA)
	M. DeLong	K. Peters	G. Naeyaert (ATSSA)
	B. Shreck	J. Ingle	C&T Staff